

Growth Performance of *Clarias gariepinus* in River Yamuna in Delhi Region

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ABSTRACT

River Yamuna, the largest tributary of river Ganga (Ganges), once known for its rich fish diversity, is now being adversely affected by degrading environmental, ecological conditions, anthropogenic pressure and invasion of alien fish species. In the recent past, invasion of the Thai mangur (*Clarias gariepinus*), an endemic air-breathing catfish in River Yamuna was one of the main concern in scientific fertility. Recent survey during the present study reveals that Thai mangur, an exotic and highly carnivorous species has completely eradicated the indigenous species *Clarias batrachus* from River Yamuna in Delhi region. Infestation of River Yamuna by such a highly carnivorous alien species is posing threat to Ichthyofaunal diversity. To study the growth performance of *Clarias gariepinus*, length (L) and weight (W) of the fish was estimated. Twenty fish samples irrespective of their sex, ranging from 28cm-55.5cm in length and 165g-1112g in weight were procured from the landing stations at Wazirabad barrage and Okhala barrage, the two extreme locations of river Yamuna in Delhi region (28° 38' N Latitude and 77° 13' E Longitude). Age of the fish sample was determined using 9-12th vertebrae which ranged from 2+ to 5+ years. Length – weight relationship was found to be “ $\text{LogW} = 0.406 + 0.036 \text{LogL}$ ”, regression coefficient ($r^2 = 0.84$). Value of exponent (<3) revealed allometric growth ($b < 3.0$) of the fish i.e. the fish grows with weight increasing slower with respect to increase in length.

Keywords: *Clarias gariepinus*, ichthyofauna, allometric, fertility